



GC/MS Report

GC3

Item	Lot 13538
98401-44	
<i>Origanum vulgare</i>	
Oregano EO	
Date	Analyst
9/15/2025	K. S

Sample Information

Sample Name: Oregano	Sample Type: EO - Single
Botanical Name: Origanum vulgare	Country of Origin: Greece
Lot Number: 13538	Analysis Date: 9/15/2025
Production Method: Steam distilled	Manufacture Date: September 2025

GC/MS

Inst. ID: Shimadzu GCMS-QP2010Ultra	Column Type: ZB-5
Injection Type: Split	Injection Volume: 0.1 µL
Split Ratio: 24.4	Temperature Program: 2C/min

Physical Data

ANALYSIS	METHOD	RESULTS
Optical Rotation @20°C	USP[781]	+0.52
Refractive Index @20°C	USP[831]	1.51760
Specific Gravity @20°C	USP[841]	0.96207

Ret. Time	Component	Ret. Idx.	Conc. %	
12.260	Tricyclene	921	0.06%	
12.405	alpha-Thujene	923	0.07%	
12.829	alpha-Pinene	931	0.76%	
13.655	alpha-Fenchene	945	0.01%	
13.763	Camphene	947	0.3%	
15.049	Sabinene	970	0.08%	
15.366	beta-Pinene	975	0.36%	
15.983	Myrcene	986	0.17%	
16.229	Unidentified	991	0.02%	
16.934	Pseudolimonene	1003	0.01%	
17.084	alpha-Phellandrene	1005	0.02%	
17.229	delta-3-Carene	1007	0.02%	
17.738	alpha-Terpinene	1015	0.31%	
17.893	ortho-Cymene	1017	0.02%	
18.235	para-Cymene	1022	9.67%	
18.529	Limonene	1027	0.21%	IFRA
18.640	beta-Phellandrene	1028	0.04%	
18.739	1,8-Cineole	1030	1.44%	
18.905	Cymene analogue	1032	0.02%	
20.437	gamma-Terpinene	1055	0.77%	
21.249	trans-Sabinene hydrate	1068	0.07%	
22.270	Terpinolene	1083	0.07%	
23.224	Linalool	1097	0.1%	IFRA
23.354	cis-Sabinene hydrate	1099	0.11%	
24.971	cis-para-Menth-2-en-1-ol	1123	0.01%	
26.225	trans-para-Menth-2-en-1-ol	1141	0.01%	
26.572	Camphor	1146	0.27%	
28.282	Borneol	1170	0.04%	
28.873	Terpinen-4-ol	1179	0.55%	
29.894	alpha-Terpineol	1193	0.07%	
30.868	trans-Piperitol	1207	0.01%	
32.201	Thymol methyl ether	1227	0%	
33.619	Linalyl acetate	1248	0.07%	
35.717	Thymol isomer	1278	0.02%	
36.078	Bornyl acetate	1283	0.04%	
36.360	Thymol	1288	17.33%	
37.033	Carvacrol	1297	66.37%	
40.416	Eugenol	1349	0.01%	IFRA
42.188	Geranyl acetate	1376	0.01%	
44.868	beta-Caryophyllene	1417	0.45%	

Ret. Time	Component	Ret. Idx.	Conc. %	
47.124	alpha-Humulene	1453	0.01%	
49.599	Bicyclogermacrene	1493	0.01%	
54.760	Caryophyllene oxide	1579	0.01%	

Total Identified Compounds **99.98 %**

TIC
25,618,625

